

AMENDMENTS TO THE CLAIMS

1.-6. (Cancelled).

7. (Original) An NMR analyzer wherein a first room-temperature space is formed penetrating through a cryostat along a center axis of a split-type multi-layer cylindrical superconducting coil system which has a ratio of the maximum empirical magnetic field to the central magnetic field of not larger than 1.3 and is horizontally arranged such that the center axis of the coil is in the horizontal direction, a room-temperature shim coil system is arranged in said first room-temperature space to improve the homogeneity of the magnetic field, a second room-temperature space is formed penetrating through the cryostat and passing through the center of said split gap in the vertical direction, and a sample to be measured and an NMR probe having a solenoid-type probe coil are inserted in said second room-temperature space, wherein said first room-temperature space is further provided with a system for irradiating electromagnetic waves of wavelengths of not longer than 0.1 mm.

8. (Original) An NMR analyzer wherein a first room-temperature space is formed penetrating through a cryostat along a center axis of a split-type multi-layer cylindrical superconducting coil system which has a ratio of the maximum empirical magnetic field to the central magnetic field of not larger than 1.3 and is horizontally arranged such that the center axis of the coil is in the horizontal direction, a room-temperature shim coil system is arranged in said first room-temperature space to improve the homogeneity of the magnetic field, a second room-temperature space is formed penetrating through the cryostat and passing through the center of said split gap in the vertical direction, a sample to be measured and an NMR probe having a solenoid-type probe coil are inserted in said second room-temperature space, and a

third room-temperature space is formed penetrating through the cryostat and intersecting the first room-temperature space at right angles thereto.

9. (Cancelled).

10. (Currently Amended) The NMR analyzer according to ~~claims 5 to 9~~ any one of claims 7 and 8, wherein the magnetic field at the center of the coil is not smaller than 11.5 T.

11. (Currently Amended) The NMR analyzer according to ~~claims 5 to 10~~ any one of claims 7 and 8, wherein the overall height of the apparatus is not larger than 2.0 m.

12. (Currently Amended) The NMR analyzer according to ~~claims 7 and 9~~ claim 7, wherein the electromagnetic waves are any one kind of, or a plurality of kinds of, far infrared rays, infrared rays, visible rays, ultraviolet rays, X-rays and γ -rays.

13. (Currently Amended) The NMR analyzer according to ~~claims 5 to 10~~ any one of claims 7 and 8, wherein the distance along the center axis is not larger than 1.5 m between the floor surface and the split-type multi-layer cylindrical superconducting coil system horizontally arranged in a manner that the center axis of the coil thereof is in the horizontal direction.